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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,373	08/04/2003	Swie Djin Nio	30394-1055	6925
5179	7590	10/06/2004	EXAMINER	
PEACOCK MYERS AND ADAMS P C			GUTIERREZ, ANTHONY	
P O BOX 26927			ART UNIT	
ALBUQUERQUE, NM 871256927			PAPER NUMBER	
			2857	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/634,373	<b>Applicant(s)</b> NIO, SWIE DJIN	
	<b>Examiner</b> Anthony Gutierrez	<b>Art Unit</b> 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/927,727.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/26/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-7 are rejected under 35 U.S.C. 102(a) as being anticipated by Anstey et al. (US Patent 5,999,485).

As to claims 1, 2, 4, and 5, Anstey et al. discloses dividing drill hole measurement data (col. 4, lines 36-40) into successive depth bands having a predetermined depth span (col. 4, lines 52-59 and col. 5, lines 5-10), producing a characterization of spectral content for each band and calculating an indicator that quantifies spectral change between successive bands (col. 5, lines 11-36), integrating the indicator with respect to depth to obtain a spectral trend (col. 5, lines 13-15), and scaling the trend using automatic gain control for a plurality of user defined gain windows (col. 5, lines 37-60), including the use of spectral trend curves (Fig. 7, element 71 and col. 7, line 15-21 and col. 8, lines 30-41).

As to claims 3 and 6, Anstey et al. discloses displaying conventional drill hole data together with the spectral trend curve (Fig. 3, and col. 6, lines 7-50, Fig. 8, and col. 8, lines 20-30).

As to claim 7, Anstey et al. discloses defining stratigraphic units to derive a model of geological structures of an examined area (Fig. 8, element 89).

**Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,721,661 B2, which does not have an earlier priority date than the Applicant's earliest priority date, discloses a method of distinguishing types of geologic sedimentation using a cycle chart and thickness intervals.

US Patent 6,131,071 discloses a method for processing seismic data using spectral decomposition.

US Patent 5,608,214, discloses a gamma ray spectral tool for use in well logging.

US Patent 5,404,010 discloses a method for analysis of a trend curve with respect to a gamma ray spectral tool used in well logging.

US Patent 4,766,543 discloses a well logging system that uses gamma rays and includes plural spectra for analysis.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Gutierrez whose telephone number is (571) 272-2215. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

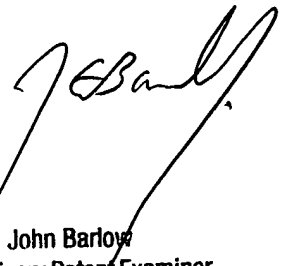
Art Unit: 2857

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Gutierrez



9/30/04



John Barlow  
Supervisory Patent Examiner  
Technology Center 2800